

AMENDMENTS TO THE CLAIMS

1-18. (Canceled)

19. (Previously presented) A method of improving a paved surface comprising the steps of:

applying a layer of liquefied asphalt on a surface;

applying a mat over the liquefied asphalt, the mat comprising a nonwoven mat produced from fibers having a melting point above 330°F (177°C) selected from the group consisting of mineral fibers, polymer fibers, and mixtures thereof, the liquefied asphalt penetrating and soaking the mat; and

applying a layer of paving material over the mat;

wherein the mat has a minimum ultimate elongation of at least 5%, and the mat has a load-elongation behavior such that when the mat is subject to tensile stress, the mat achieves at least 90% of its ultimate load at an elongation not greater than 5% of the specimen length in the direction of applied stress.

20-21. (Canceled)

22. (Previously presented) A method according to claim 19 wherein the fibers have a melting point of at least about 350°F (177°C).

23-38. (Canceled)

39. (Previously presented) A method of improving a paved surface comprising the steps of:

applying a layer of liquefied asphalt on a surface;

applying a mat over the liquefied asphalt, the mat comprising a nonwoven mat produced from fibers having a melting point above 330°F (177°C) selected from the group consisting of mineral fibers, polymer fibers, and mixtures thereof, the liquefied asphalt penetrating and soaking the mat; and

applying a layer of paving material over the mat;

wherein the mat has a minimum ultimate elongation of at least 5%, and the mat has a load-elongation behavior such that when the mat is subject to tensile stress, the mat achieves at least 90% of its ultimate load at an elongation not greater than 5% of the specimen length in the direction of applied stress; and

wherein the mat is resistant to shrinkage such that when a 4 ounce (113.4 gram) sample of the mat is held in an oven at 325°F (163°C) for one minute, the area of the mat is reduced to not less than about 90% of its original area.

40. (Previously presented) A method according to claim 39 wherein the fibers have a melting point of at least about 350°F (177°C).

41. (New) A method of improving a paved surface comprising the steps of:
applying a layer of liquefied asphalt on a surface;
applying a mat over the liquefied asphalt such that the liquefied asphalt penetrates and soaks the mat, the mat comprising a nonwoven mat produced from fibers having a melting point above 330°F (177°C) selected from the group consisting of mineral fibers, polymer fibers, and mixtures thereof; and
applying a layer of paving material over the mat;
wherein when a load is applied to the paved surface and transmitted through the paving material to the mat, the mat is capable of elongation in response to the load such that the mat has a minimum ultimate elongation of at least 5%, and the mat has a load-elongation behavior such that when the applied load subjects the mat to tensile stress, the mat is capable of achieving at least 90% of its ultimate load at an elongation not greater than 5% of the mat length in the direction of the applied tensile stress.

42. (New) A method according to claim 41 wherein the layer of paving material is hot when applied, and wherein the mat is resistant to shrinkage when the hot paving material is applied over the mat, the shrinkage resistance of the mat being measured by a test in which a 4 ounce (113.4 gram) sample of the mat is held in an oven at 325°F (163°C) for one minute and the area of the mat is reduced to not less than about 90% of its original area.